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**It is the local accommodation responsible for the
depopulation in Lisbon?**

Patrícia Alexandra Figueiredo Roque

Dissertation presented as the partial requirement for
obtaining a Master's degree in Information Management

NOVA Information Management School
Instituto Superior de Estatística e Gestão de Informação
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IT IS THE LOCAL ACCOMMODATION RESPONSIBLE FOR THE DEPOPULATION IN LISBON?

Patricia Alexandra Figueiredo Roque

Dissertation presented as the partial requirement for obtaining a Master's degree in Information Management, Specialization in Marketing Intelligence

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ABSTRACT

In this dissertation project, research will be carried out on the impact of the "local accommodation" phenomenon in the city of Lisbon, highlighting the question about the relationship between depopulation in the central area of Lisbon and the development of this activity.

The AL consists of establishments that provide temporary lodging services to tourists, by remuneration and that meet the requirements of the law. It is an offer of accommodation that connects the tourist with the traditions and culture of the city, which has been growing exponentially in the country, highlighting the region of Lisbon. In a context of tourist pressure and real estate speculation, associated with the number of houses for local accommodation, several questions arise about the real impacts of this activity in the city.

Through questions made only to owners of LA in Lisbon registered in the National Registry of Tourism, I will obtain concrete information on the proposed objectives, concluding with general tendencies on the subject.

KEYWORDS

Tourism; Local Accommodation; Impacts; Depopulation; Lisbon

RESUMO

Neste projeto de dissertação, irá ser efetuada investigação sobre o impacto do fenómeno “alojamento local” na cidade de Lisboa, destacando a interrogação sobre qual a relação entre o despovoamento na zona centro de Lisboa e o desenvolvimento desta atividade.

O AL consiste em estabelecimentos que prestam serviços de alojamento temporário a turistas, mediante renumeração e que reúnam os requisitos da lei. É uma oferta de alojamento que liga o turista às tradições e cultura da cidade, que tem vindo a crescer exponencialmente no país, com destaque para a região de Lisboa. Num contexto de pressão turística e especulação imobiliária, associado ao número de casas destinadas ao alojamento local, na cidade surgem várias questões dos impactos reais desta atividade.

Através de inquéritos feitos apenas a proprietários de AL em Lisboa registados no Registo Nacional De Turismo ira-se obter informações concretas sobre os objetivos propostos, concluindo com tendências gerais sobre o tema.

PALAVRAS-CHAVE

Turismo; Alojamento Local; Impactos; Despovoamento; Lisboa

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ABREVIATIONS

CC	(Collaborative Consumption)
LA	(Local Accommodation)
MA	(Metropolitan Area)
INE	(Instituto Nacional de Estatística)
NUT	(Nomenclatura das Unidades Territoriais para Fins Estatísticos)
OMT	(Organização Mundial do Turismo)
P2P	(Peer-to-peer)
RNT	(Registo Nacional de Turismo)
SE	(Sharing Economy)
STR	(Shor-term rental)
TP	(Turismo de Portugal)
TR	(Turismo Rural)
ULA	(Unit of Local Accommodation)

1. INTRODUCTION

1.1. BACKGROUND AND DEFINITION OF THE PROBLEM

The growth of tourism over the last 2 or 3 decades has been quite remarkable in numerous aspects of society, becoming one of the most important development generator in a large number of countries and regions.

In this way, decision-making in tourism planning and development has becoming more complex and as the number of guests, overnight stays and revenues increases significantly, economic, social and environmental issues arise for the organizations and communities. An important contribution in this area was made by Mathieson & Wall (1982), providing an overview of the economical, physical and social impacts of tourism. (Sarrión-Gavilán, Benítez-Márquez, & Mora-Rangel, 2015).

According to the Minister of Economy, "Tourism is a strategic economic activity for the economic and social development of the country, namely for employment and export growth." The year of 2016 was marked by historical results for the national tourism in the main indicators: overnight stays, revenues, guests, employment and exports, being considered the largest export activity in the country, with 16.7% of exports. (Fazenda, Gouveia, Gaspar, Costa, Ferreira, Feijão, Lourenço, Parreira, Gomes, Duarte & Gonçalves, 2017)

Tourism is mainly an urban phenomenon with several stakeholders involved, which gives this activity a very complex nature. As Edwards (2008) states, urban tourism is defined as one among many social and economic forces, it covers a variety of products and experiences, in which depending on the motivations and preferences of the tourist, is created the engagement with the host community. All of this results in a series of consequences for both the surrounding community and industry as for the tourist.

Focusing on the short-term accommodation, specifically the Local Accommodation, the controversy and debate around the theme is ample, because of the lack of information. There are several and recurrent criticisms made to Local Accommodation (LA), among them the loss of city identity, expulsion of residents and contribution to real estate speculation. So, it is necessary a reflection and developing on the theme.

1.2. INVESTIGATION GOALS

The present proposal aims to study the impacts of Local Accommodation, namely the impact of local accommodation on the depopulation of the central area of Lisbon.

That said, there are two fundamental questions for research:

-Local Accommodation causes the expulsion of the residents?

To answer the question, it is necessary to know if local accommodation is related with the reduction of housing stock available for the long-term leasing/traditional leasing.

- Is the local accommodation in Lisbon associated with a new tourist product or new form of tourism based on sharing?

Try to understand if the LA was developed in a logic of capital profitability with strong associations with real estate or is associated with a new form of tourism based on sharing.

The concept of home sharing is not new (Guttentag & Smith, 2017), however the internet has facilitated the rental of accommodation between LA owners and tourists. In this sense two phenomena arise, collaborative consumption and sharing economics (Belk, 2014)

Addressing these issues implies knowledge of the Unit Profile.

1.3 INVESTIGATION RELEVANCE

In 2017 there were 1.323 million international tourist arrivals worldwide, corresponding to an increase of 84 million over the previous year. (Tourism Statistics, 2017)

With the growth of tourism, there is a new form of accommodation called also for short-term accommodation, which deeply marked some of the areas of our country by enhancing a set of characteristics that give life to rural tourism. (Dg-flup & Abstract, 2008).

In parallel, the growth of Family Housing in the Algarve, Porto and Lisbon areas has been insignificant from 2011 to 2016 (Construction and Housing Statistics 2016, 2016), thus reveals a housing problem in these areas.

In 2017, 66.3% of the total rehabilitation work was for family housing, while in 2012 it was 74.9%. The question is not the declining in the total rehabilitation houses, the question is the declining in the rehabilitation work for family housing. The evolution of the number of licensed buildings and fires between 2012 and 2017 has been declining until 2015 in most NUTS II regions. The only exception was in the Lisbon Metropolitan Area in 2014, where there was an increase of 55.0% in licensed buildings. (Construction and Housing Statistics 2017, 2017).

In this scenario, it is important to deepen the theme of Local Accommodation in the central region of Lisbon and understand its evolution and impacts over time.

2. LITERATURE REVIEW

2.1. GENTRIFICATION

With the socioeconomic and urban changes taking place in European cities and with Lisbon in the ranking of the cities with the highest tourist growth, gentrification appears as a phenomenon that affects the dynamics of a region / neighbourhood and according to Baione (2013) "A Gentrification is a process whereby marginal urban neighbourhoods are rehabilitated and revitalized by middle and upper-class residents and involves a complex network of causes and factors. "

Some researchers consider gentrification inevitable in large cities as an expected result of the free operation of housing market. Although the very apparent social characteristics of undervalue neighbourhoods do not stimulate urban development, the hidden economic characteristics are beneficial. So, if gentrification is crucial to the restructuring of urban space, it does not depend on the flow of citizens, but rather on the capital movements involved. (N. Smith & Smith, 2007)

The rent gap theory was developed by Neil Smith (1979, 1987) in the context of the dynamics in the housing market and the process of gentrification, being described as the gap between the current capitalized income due to the current use of the property and the income obtained with greater and better use of the property.

In Portugal, the phenomenon rent a gap arises in a logic of unequal development and devaluation. In the case of Lisbon, the historical centre depreciation is done intentionally to guarantee investment of future capital, joining in the process of capital accumulation (D. N. Smith, 2014)

Associated with restructuring projects such as renovation, rehabilitation, regeneration and requalification, gentrification when it is not balanced can cause conflicts. (Ribeiro, 2017)

Neil Smith (1996) studied the effect of the material structures as well as the causes of the socio-spatial inequalities produced by the advance of the gentrification frontier in the urban landscape. Neil as well as Harvey (2011, 2012, 2014) and other researchers argue that although the gentrification process has positive aspects, it causes the regeneration of whole neighbourhoods, which often implies the expulsion of the residents with lower economic capacities in the central areas.

In neighbourhoods where the gap between the actual and potential rent, returns consistently, the result will be an incentive for real estate capital to direct new housing investment flows.

With the raise of short-term rentals, a new potential revenue stream in housing markets occurs, suggesting the possibility that Airbnb is systematically creating rent gaps in the cities. For these properties which have a new highest and better use, there was no sustained period of speculation and gradually increasing actual rents, but rather an exogenous shock to potential rent. (Wachsmuth & Weisler, 2018).

2.2. MOTIVATION AND PERCEPTION FOR TRAVEL

The perceptions about what makes a unique and memorable trip change all the time and consequently the professionals involved in this area must adapt the tourist product to the consumer (in this case the consumer is the traveller). Smith was one of the few who investigated the tourism product, suggesting 5 elements, which when correctly integrated contribute to the satisfaction of the multiple tourists needs (Smith, 1994, cit in Xu, 2010).

These 5 elements are the Service, Hospitality, Involvement, Freedom of Choice and Physical Plant, and they differ in consonance with the type of tourism product.

According to Xu (2010) the five elements were prevalent and yet differed in their importance for tourists among a variety of tourism products, and the physical plant is inserted in the core of tourism, with the other 4 elements competing but complementary in a peripheral circle. The main physical plant only represents the partial satisfaction of the client, when the minimum of tangible needs (physical plant and freedom of choice) are fulfilled, and the elements of support originate satisfaction with experiences that aim at greater self-induced needs (Balmer & Baum, 1993; Xu, 2010). However, those involved in the tourism product creation need to take a holistic view of this model.

Nowadays consumers value the all experience, so in my opinion it is necessary to consider while producing tourism products, all stages of consumer experience (before, during and after), whether in the tourism sector or in any another sector.

There are several possible motivations for urban destinations, which according to Georges Cazes and François Potier (1996) are distinguished in 5 main stimuli: enjoyment,

reunion, business, events and commercial. The enjoyment is connected to free time trips; reunion related to trips for visiting family and friends; business related to the job trips; events come from occasional situations such as concerts, football matches and commercial that is motivated by shopping. (Tel, n.d.).

2.3. SHARING ECONOMY

In the internet era, where everyone shares their own experiences and status, new stimuli appear to the market related to the term sharing economy. The emergence of peer-to-peer platforms, collectively known as the “sharing economy,” are growing rapidly and have enabled people to collaboratively make use of under-utilized inventory (“idle capacity”), through fee-based sharing.(Zervas, Proserpio, & Byers, 2013; Meelen and Frenken, 2015).

The notion of under-utilization is also key to the current discussion about home sharing platforms. When a house owner is away for holidays or business or has a spare bedroom, the asset is not utilized. That is the unoccupied house can be considered as temporary idle capacity.

If, however, a person were to buy a second home and rent it out to tourists permanently, that constitutes executing a commercial lodging site. (Frenken & Schor, 2017)

With the rise and variation on the term sharing, it is important to make some distinctions, because there are a vast variety of activities that invoke this term but some of them do not involve true sharing. In the pre-digital age share was meant to produce social exchange, that means regardless of the reason to a person share, economic or social, the decision to share will generally produce an intensification of social activity and social exchange, an example if two friends buy a music CD-ROM, each one will only have part of the control of this material but the purchase and the album creates a link between them. Sharing of immaterial things is social in the first place, because produces things like knowledge, art, social relationships, rules, etc. In the digital age share is about social exchange on the one hand and about distribution and propagation of content on the other hand. (Wittel & A., 2011).

As notice, the term sharing is not new in the history, and according to Fernandes et al. (2018) the grow of sharing economy it's due to 4 main factors: economics (necessity to find additional sources of income; political (retraction of social state, deregulation and generic

advancement of market liberalization); technological (digitalization); and social (new lifestyles).

Although the accommodation sharing is highly economically motivated, the social motivations as an important role to. (Böcker & Meelen, 2017)

Another concept to retain is collaborative consumption that is not the same as sharing economy, collaborative consumption is people coordinating the acquisition and distribution of a resource for a fee or other compensation, that means we consume without the need to buy new things or own particular things, an example is the BMW's DriveNow. (Belk, 2014).

As notice, the definitions are changing over the time and the motivations and mentality of individuals to. In a recent study about the drivers and impediments of peer-to-peer sharing services, from the consumer perspective, motives like Effort Expectancy (negative correlation), Enjoyment in sharing, knowledge, Social Experience and Social Influence, are the most significantly correlate with usage at the 5% p level. From the provider perspective, enjoyment in sharing, effort expectancy (-), social experience, sense of belonging and knowledge are the most highly correlated with usage.(Hawlitschek, Teubner, & Gimpel, 2016).

2.3.1 Sharing Economy Related Concepts

As research on this topic increases, a lot of terms appear in order to explain problematic issues concerning the intentions of the sharing economy involves.

Regarding market structure concepts related with the term of share economy, is it first necessary to disclose some definitions.

On demand economy

The on-demand economy or as some authors call gig economy, was stimulated with the rise of new technologies by connecting suppliers with consumers. UBER is an example of on demand business and how car services sector is growing and continues to be an excellent opportunity for growth. (Jaconi, 2014)

A few conclusions extracted by Cockayne (2016) shows how easily is to set up economic vocabulary with sharing and is a way for some people of on demand activity to manifest economic transaction and private holding as fundamental to life.

Second hand economy

Consumer to consumer (C2C) business interactions are insert on the second hand economy. These interactions between consumers has been facilitated by social networks. The intent for second hand transactions are characterized as ecological, altruistic and economic, contributing to a greener lifestyle. (Leismann et al., 2015)

An example is the EUA company EBAY, who facilitates the c2c transactions and stimulates the reuse/resell of the products.

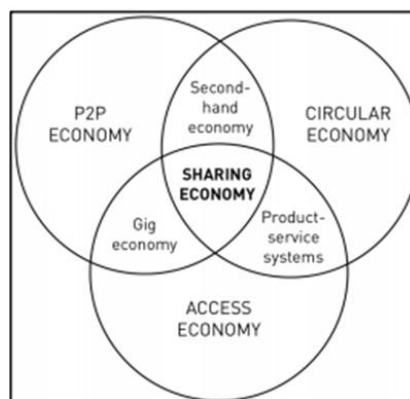
Product Service Systems

PSS consists in rent goods from a company and is known to have the potential to minimise environmental impacts of both production and consumption (Hong, Lin, Chen, & Ouyang, 2009).

Bike sharing is an example, nowadays on Lisbon streets we can see a lot of examples, we pay to use the product without own it.

According to Frenken (2017), the conceptual uncertainty of the sharing economy is due to its position between 3 economic concepts: circular economy, p2p economy and access economy. (Frenken & Schor, 2017; Guyader & Piscicelli, 2019)

Figure 2: Adapted from Frenken (2017) (Guyader 2019)



Until now was talked about concepts related with the **market structure**, but there is another important concern regarding **market orientation** (non-profit or profit).

Is notable the changes on the dynamics of sharing enterprises and how difficult is to understand the real intentions of the intervenients besides the market structure and orientation.(Schor, 2016)

For instance, Airbnb allows individuals to share their homes, while Lyft and Uber transform private cars into common resources. (Quattrone, Proserpio, Quercia, Capra, & Musolesi, 2016)

2.4. LOCAL ACCOMMODATION

Local Accommodation is a new form of tourist offer also called short-term accommodation, which has deeply marked some of the areas of our country through the enhancement of a set of characteristics that give life to rural tourism. (Dg-flup & Resumo, 2008).

Some researchers have investigated how the new business models based on the so-called sharing economy shape market mechanisms. (Einav et al., 2013, cit in Horn & Merante, 2017).

Focusing on the question of how the sharing economy shapes the real estate market, through the study of Horn & Merante (2017) about the effects of the growth of Airbnb in the neighborhoods of Boston on the rental market, and applying individual leasing listings, by estimating the impacts of Airbnb on rents and in the number of available rental units, it was found that an increase in the standard deviation in Airbnb density leads to a 0.4% increase in local rents.

In Portugal, there are strong indicators that LA is seen as a new tourist product rather than a process based on sharing. Data from AIRDNA reveal that most homeowners put in a larger proportion whole house for lease rather than rooms.

In a recent study on the impact of LA on urban rehabilitation in Lisbon, where surveys were carried out on LA owners in the historic center of Lisbon, about one-third of the

habitations analysed were settled in old houses, confirming the idea that local accommodation can contribute to the reduction of stock of traditional habitations (Eduardo et al., 2016)

The perception by the Portuguese people about the importance of this activity for the development of the cities is positive. However, there are many doubts about the impacts, raising questions at the fiscal level, changes in the social dynamics of the region, among others (Local & Debate, 2018; Ribeiro, 2017)

2.4.1 Local Accommodation Media Communications

Source: “Tudo é economia” (television weekly program about economics and finance)

Subject: Local Accommodation

According to Fernando Medina, local accommodation used to be fully liberalized so was necessary to apply absolute containment in areas with a ratio equal to or greater than 20% compared to the number of dwellings.

He agrees with the benefits of this activity that includes responding to tourist demand, requalification of several cities in the city, but also with the risks, claiming several areas with excessive pressure from LA, namely the historic tourist center, which poses the risk of decreasing permanent housing, but also loss of authenticity and compromising the sustainability of tourism.

Source: “Expresso” Journal (Jornal Expresso, 2019)

Subject: "Airbnb é economia de partilha, não hotelaria"

Augusto Mateus, economist, consultant and ex-minister of the economy during the congress of the Portuguese Association of Travel and Tourism Agencies (APAVT) states that Portugal should follow sustainable tourism models, citing Amsterdam as an example, where individuals can only share the 30% of the total for the year.

Augusto Mateus mixed local accommodation, Airbnb and sharing economy, as if everything were the same.

Source: “Dinheiro Vivo” Journal (Jornal Dinheiro Vivo, 2019)

Subject: “Não há novas casas a entrar no arrendamento tradicional”

The new registrations of local accommodation reached, in October, a minimum of almost three years. But fewer houses entering the tourist rental market is not synonymous with more offers for those looking for a rental for life.

2.5. HOUSING PROBLEM

To understand the housing problem verified in the city of Lisbon, it is necessary to go back in time and understand the history and evolution of Portuguese society in the housing dynamics, and how the transformations occurred in the society affect the way of elaborating the policies of housing.

Throughout history it has become apparent that the non-intervention of the State in the economy, notable in the 19th and the beginning of 20th centuries, may have negative social and economic effects due to the lack of social policy measures.

During industrialization, several housing units of different social strata were built, contributing to unequal housing growth.

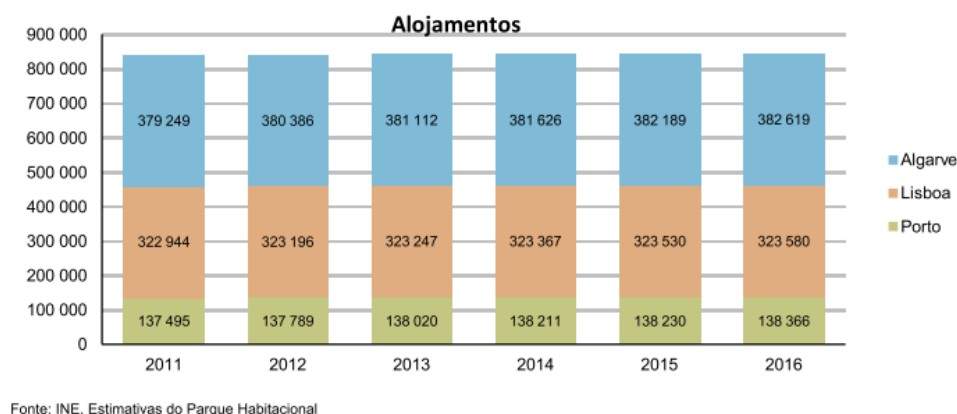
In Portugal, the second half of the twentieth century is characterized by instability in the housing dynamics, which due to the migratory flow from the countryside to the city as well as the return of "returnees" (retornados) from the former colony, generated a failure in the housing supply and consequent clandestine construction.

The unconvincing of the clandestine just stabilized in the 1980s along with the Special Rehabilitation Program (PER) in 1993, created with the aim of relocating the residents of the neighbourhoods with no conditions (“barracas”) in the metropolitan areas of Lisbon and Porto. (Guerra, 2012; Moura, 2001)

Sometimes state must adopt a paternalism position to protect the society, in the case of house market, policies must be adopted to maximize utility – defined here as well being.

2.5.1 House Supply

Figure 2: Housing stock Estimates



According to the Estimates of the National Statistical Institute of Housing, the number of households for families has not increased in the period 2011-2016, which shows that there was practically no offer in recent years.

The House price index continued to record, in 2017, an increase in the average level of prices of traded homes, significantly higher than the inflation rate, measured by the Consumer Price Index (CPI) change rate.

In 2017, the median price of home sales in Portugal was 932 €/m², an increase of 7.6% compared to the previous year. The median house price remained above the national value in the regions of Algarve (1 383 €/m²), Area Metropolitan de Lisbon (1 262 €/m²) and Region Autonomy da Madeira (1 126 €/m²).

In 2017, the median house rental value of the 84 383 new lease agreements registered in Portugal was 4.39 €/m². The median rent stood above the national value in the regions of Área Metropolitana de Lisboa (6.06 €/m²), Região Autónoma da Madeira (5.15 €/m²), Algarve (5.00 €/m²) and Área Metropolitana do Porto (4.58 €/m²).

2.5.2 House Demand

Table 1: Total Employed Population (Individual – Thousands)

Ano	R.M. Lisboa	Total (Continente)
2011	1222,2	4515,8
2012	1160,6	4333,5
2013	1132,9	4221,4
2014	1177,0	4286,1
2015	1205,0	4329,6
2016	1233,3	4383,5
2017	1270,6	4526,5

* Indicator refers to the entire sector of economic activity; INE Source

In 2017 about 28% of the employed population in Portugal (Continent) is working in the Metropolitan Region of Lisbon, a high value comparing to the rest of the country, this demonstrates the clear centralization of employment in Lisbon.

Table 2: Foreign population resident in Portugal

Ano	Lisboa	Total (Continente)
2011	188.259	436.822
2012	181.901	417.042
2013	176.963	401.320
2014	176.927	395.195
2015	173.521	388.731
2016	173.118	397.731
2017	182.105	421.711

*SEF Source

The highest value of foreign population resident in Portugal was in 2011. What is important here is that for example for the year 2017, 43% of the foreign people living in Portugal stays in Lisbon.

Table 3: Population Density (Average number of individuals by km²)

Ano	R.M. Lisboa	Total (Continente)
2011	941,0	112,7
2012	940,3	112,3
2013	932,9	111,6
2014	931,4	111,0
2015	932,2	110,6
2016	934,3	110,3
2017	937,7	110,0

* Source INE; IGP; PORDATA; Formula Inhabitants / Surface in Km²

Population density refers to the population intensity expressed by the ratio between the number of citizens of a given territorial area and the area of that territory (usually expressed in number of inhabitants per square kilometre). (metadata - INE). Lisbon and Porto are the regions with the highest values of population density.

Table 4: Local Accommodation Registered

Ano	R.M. Lisboa	Total
2011	34	1350
2012	99	1645
2013	180	2031
2014	657	4081
2015	2099	10195
2016	3099	11236
2017	4201	18810

*Source Registo Nacional de Turismo

Since 2015 there has been a high increase in the number of registered housing to the present day.

2.5.3. Conclusion

The media speaks every day about the rise in house prices, describing to a “Real State Speculative Bubble”. In addition, much political attention has been paid to this subject, mainly to end up this speculation and unaffordable rents.

The principal responsible for this, is the local accommodation (as they say), but as we know, there is the law of demand and supply. That is: when there is a small quantity, prices go up, and so on. So, it is necessary to analyse the both sides of the “coin”.

There is a big problem in the house supply, raising taxes, delaying rehabilitation will only delay the development and expansion of the city.

3.METHODOLOGY

3.1. OBJECTIVES AND HYPOTHESES

One of the dissertation purposes is to understand if the local accommodation is related with the depopulation in the Lisbon area.

To study this investigation question, there is a null hypothesis and an alternative hypothesis defined as:

H0: The local accommodation is related with the reduction of habitational stock available for the traditional leasing

H1: The local accommodation is not related with the reduction of habitational stock available for the traditional leasing

A questionnaire was built with several questions made according to the individuals answers.

3.2. QUALITATIVE RESEARCH

Qualitative researchers focus on understanding the problem and extrapolation to similar situations instead of quantitative researches who pursue forecast and generalization verdict through the use of experimental methods and quantitative measures. (Hoepfl, 1997).

In the case of this investigation, qualitative interviews (Patton, 1990) were used for a better understanding of Local Accommodation theme, trying to demystify some questions about the accelerated LA transformation in the cities. Some questions are written below:

- What is the investors profile? And who they are? How do they operate in the market?
- How sharing is this economy?
- How much jobs are being created in this modality?
- What is the balance of the ecological structure of the city and the coexistence of the stakeholders?
- ...

Some of these questions will be answered with the questionnaire for the Lisbon region but through the qualitative interviews I will be able to understand the phenomenon in Portugal.

3.2.1 Sampling Plan

The quality investigation will be conducted through study analysis, articles, documents and semi-structures interviews to individuals who have knowledge about local accommodation theme in Portugal.

The individuals will be selected by convenience, a non-probabilistic method where is used individuals who are already available. (Ferreira & Campos, 2011)

One of the interviewed is Luís Carvalho, who wrote the book “O Porto e o Airbnb”. This book approaches some important subjects as the increasing of Airbnb; economic dynamics and urban life transformation and a reflection about change.

Besides the noticed impacts of local accommodation in resilience and social sustainability in the historical center of Lisbon, LA can contribute to urban requalification and local development of some other areas as up-country.

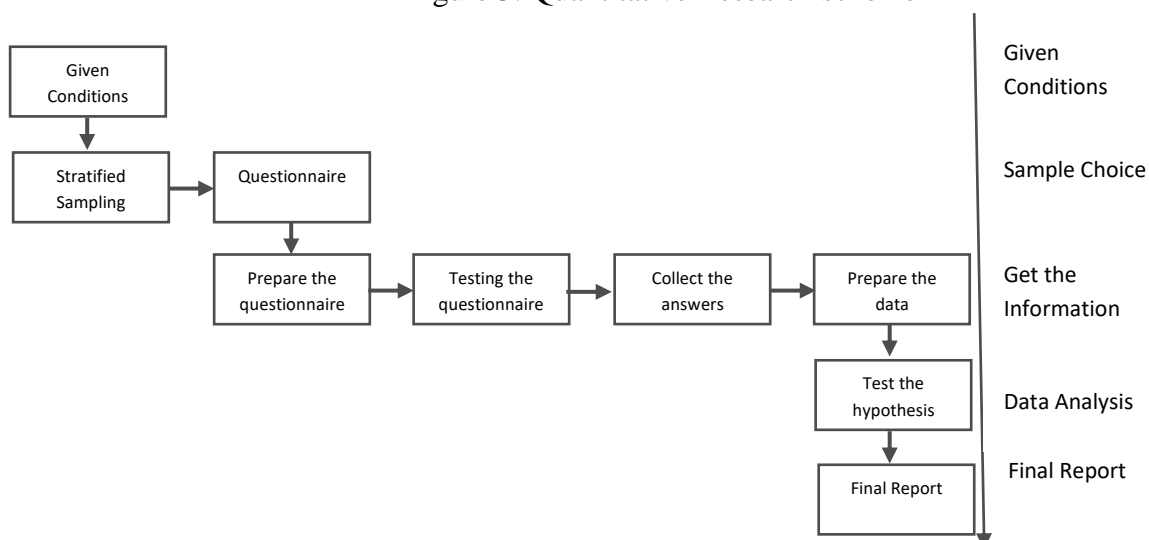
3.2.2. Data Analysis

The analysis of the information will be made using content analysis.

3.3 QUANTITATIVE RESEARCH

To study the population, in this scenario the population are the owners or holders of local accommodation in Lisbon, it is necessary to do a poll in order to select the sample from the population, which an inquiry is applied, for possible extrapolation to the entire population (Vicente, Reis e Ferrão, 1996)

Figure 3: Quantitative Research scheme

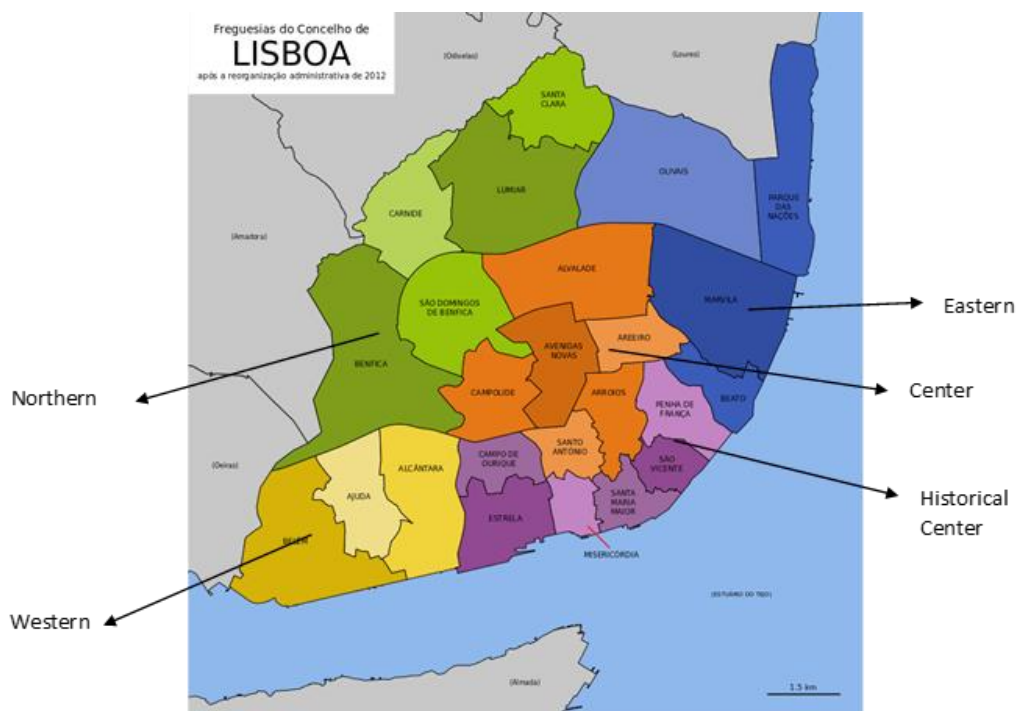


3.3.1. Sampling Plan

The present dissertation intends to inquire local accommodation owners in Lisbon, using a stratified technique where the population extracted from “RNT (REGISTO NACIONAL DE TURISMO)” is divided according to the recent organic restructuring of Lisbon City Council.

Through the implementation of a concept of proximity management, 5 areas designated by historical center, center, eastern, western and northern, were created and represent the Territorial Units.

Figure 4: Lisbon Map



In the random samples, the selection scheme designates which element to choose, because of the listings that contains references about the elements present in the sample.

To collect the necessary data, a questionnaire was sent by email to the elements. The questionnaire was pre-testing to understand if questions are understood by all the people and there are no different perceptions in the same question.

A qualitative pre-test is a key phase of the development, the main purpose of the pre-test is to verify that the target audience understands the questions and proposed response options as intended by the researcher and is indeed able to answer meaningfully.

The realization of pre-test was done in order to understand more about LA owners, and with that information updated some of the questions of the final questionnaire.

The pre-test was shared on 2 Facebook groups, Local Accommodation and Local Accommodation Owners.

The minimum sample calculated for a confidence interval of 95% with an error margin of 5% for $N=7211$, is $n=444$ individuals (with the sample oversizing because of non-response).
(ANNEXE A)

The p-value used for the sample sizing was based on the pre-test results.

A second sample sizing was necessary because of the lack of answers in the first attempt.

More than 30% of the contacts in the RNT were local accommodation management agencies, and the questionnaire was made to local accommodation owners. The first question of the questionnaire is “Are you the owner of the LA?”, if the answer was no, the survey was automatically over.

3.3.2. Data Analysis Model

The data collected was statistical analyzed by software R, who provides a wide variety of statistical (linear and nonlinear modelling, classical statistical tests, time-series analysis, classification, clustering, ...) and graphical techniques, and is highly extensible.

To test the hypothesis H_0 : The local accommodation is related with the reduction of habitational stock available for the traditional leasing, against the null hypothesis one uses the usual statistical test for one proportion.

This test-statistic is then related with a critical value and if it is originated to be superior than the critical value the hypothesis is rejected.

The test statistic is as follows:

$$\hat{p} \text{ for } \sqrt{\hat{p} * (1-\hat{p}) / (n-1)}$$

where \hat{p} is the estimated proportion based on the sample.

If we conduct the test at 5% significance, we reject H_0 if the test statistic is greater than 1.645.

This test-statistic is then related with a critical value and if it is originated to be superior than the critical value the hypothesis is rejected.

4. RESULTS

4.1 PRE-TEST RESULTS

Through the realization of pre-test, was notice able to understand more about LA owners, and with that information change some of the questions of the final questionnaire, as enumerated below:

-Add more reasons in the question “Reasons to not choose Traditional Market”. A study from PROAL (group of LA owner), in 350 members who voted, almost 85% show that the LA restrictions will not have the desired impact of putting the houses on traditional lease market. The reasons were described by the individuals present in this group, and some of the reasons I didn’t had think before.

- Add renting in the question “how did you get the property. For what I understood, there is a lot of people who don’t buy the houses, just rent to the owner and then rent again to tourists.

4.2 FINAL RESULTS

4.2.1 Sample Characterization

In the present chapter will be revealed the investigation results. Starting with sample characterization, following a Unit Profile Characterization, Local Accommodation Typology, the Flowchart created to represent the process for dealing with the different answers, and some additional information.

Table 5: Sample Characterization

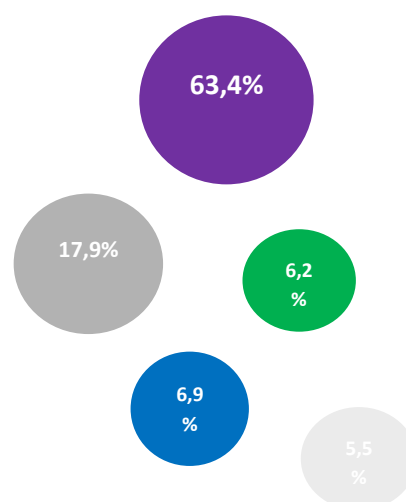
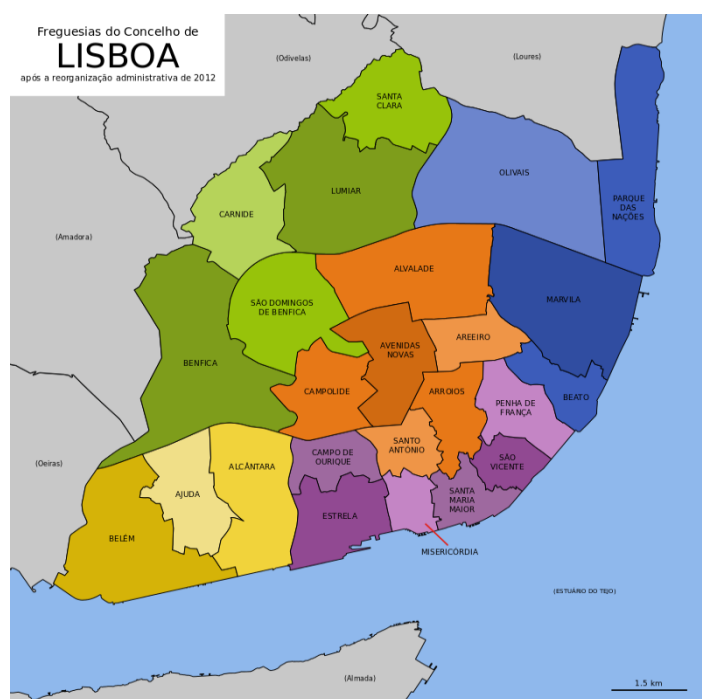
Variable	Category	Frequency	Percentage
Gender	Male	73	50,3%
	Female	72	49,7%
Habitations	Basic	4	2,8%
	Highschool/Professional courses	13	9%
	Bachelor's degree	56	38,6%
	Master's degree	55	37,9%
	PhD	15	10,3%
	Bachelor's degree before Bologna	1	0,7%
	Postgraduation	1	0,7%

Regarding gender, the distribution of respondents corresponds to 50,3% (73 individuals) for males and 49,7% (72 individuals) for females.

Respecting academic qualifications, 88,2% have higher education qualifications – 38,6% of bachelor's degree, 37,9% Masters/Integrated Master, 0,7% Postgraduation and 10,3% Doctorate Degree. Only 11,8% corresponds to high school and basic school.

4.2.2 Unit Profile Characterization

Unit localization



As expected, the center and historic center are the areas with more units of local accommodation.

63,4% of the answers regarding where is the local unit are from historical area of Lisbon, 17,9% are from center area, 6,9% from eastern area, 6,2% from northern and 5,5% from western area.

4.2.3. Local Accommodation Typology

Table 6: Local Accommodation Typology

Variable	Category	Frequency	Percentage
Unit Type	Apartment	136	93,8%
	Lodging establishment	4	2,8%
	Rooms	3	2,1%
	Villa	2	1,4%
Unit explored by	Holder	95	65,5%
	Company	48	33,1%
	Others	2	1,4%
Number of local accommodation units	1	42	29%
	2	20	13,8%
	3 or more	83	57,2%

The type of unit for local accommodation that most people rent are apartments, as seen in the literature review and AirDNA.

The majority of people (93,8%) have 3 or more units of local accommodation, one unit 34,8% and 2 units 8,7%.

4.2.4. Flowchart

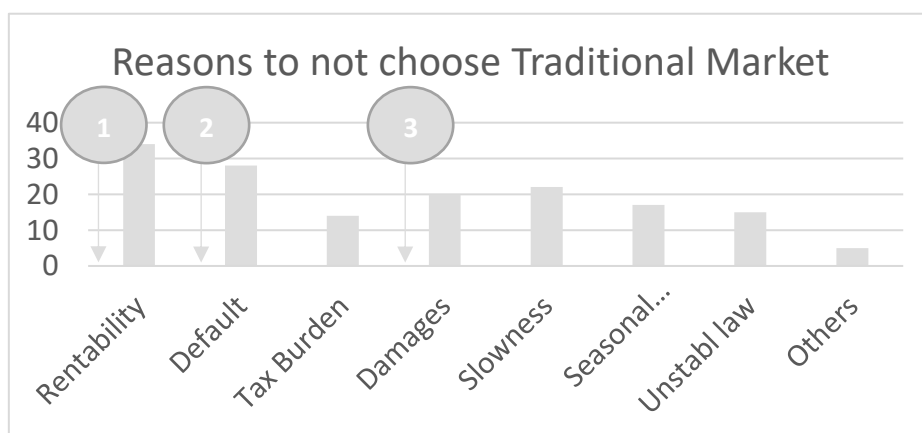
In order to reach information about my hypotheses H0: The local accommodation is related with the reduction of habitational stock available for the traditional leasing, the survey questions were differentiated according to the answers. A flowchart was made in order to show the different ways the questionnaire can have (Annex B)

Questions in the flowchart:

- 1- Unit type
- 2- Unit explored by
- 3- Property situation before being Local Accommodation
- 4- What is the status of the room (s) before being allocated to local accommodation
- 5- The accommodation is still used as first home or second/seasonal home
- 6- How did you get the property
- 7- Did you purchase the property for the purpose of placing in the local accommodation market
- 8- Did you rent the property for the purpose of placing in the local accommodation market
- 9- At some point, did you consider to put the property in the traditional rental accommodation

4.2.5 Additional Information

Figure 4: Main reasons for not placing the property on the traditional market?



Lower profitability compared to other options, high probability of default and slowness in eviction actions are the main reasons for people do not place the property on the traditional market.

Table 7: Reasons to choose AL

Reasons	Scale									
	1	2	3	4	5	6	7	8	9	10
Rentability	0,7%	0,7%	0,7%	0,7%	4,8%	5,5,%	10,3%	21,4%	17,9%	37,2%
Bureaucracy	2,8%	2,8%	3,4%	5,5%	18,6%	13,1%	11,7%	20%	7,6%	14,5%
Time Spent	4,8%	2,1%	5,5%	2,1%	14,5%	11,7%	13,1%	22,8%	8,3%	15,2%
Social Experience	11%	5,5%	9%	4,8%	11%	10,3%	7,6%	15,9%	8,3%	16,6%
Third Influence	26,9%	12,4%	9%	6,9%	13,8%	8,3%	6,2%	5,5%	2,8%	8,3%
Past Experiences	25,5%	4,1%	7,6%	3,4%	15,2%	6,2%	8,3%	12,4%	7,6%	9,7%
Show Portuguese Culture	15,9%	6,9%	5,5%	4,8%	11%	6,2%	10,3%	15,2%	7,6%	16,6%
Sharing culture	21,4%	9,7%	4,8%	6,2%	15,9%	6,2%	9,7%	11%	2,8%	12,4%

In order to evaluate the importance that each of the following reasons had in the decision to choose LA, was made an evaluation scale to measure respondents opinions and behaviours in a quantitative way, where 1 means “nothing important” and 10 “very important”.

As expected Rentability is one of the most important reasons that motivates people getting in this activity. In fact, 57,3% of the LA owners who answered the questionnaire never had considered place the property on the traditional rental market.

Bureaucracy and time spent has influence when people are deciding if they will invest in LA or not. As noticed in the data collection, a lot of registrations on the RNT (Registo Nacional de Turismo) are in the names of local accommodation companies who make all the unit management, optimizing costs and maximizing results.

One interesting fact is spirit of sharing and union is not so important, enabling conclude that the so-called idea of sharing is out of place because it has a much lower expression than is regularly pointed.

5. ANALYSIS AND DISCUSSION OF RESULTS

5.1 LOCAL ACCOMMODATION CAUSES THE EXPULSION OF THE RESIDENTS

Regarding the hypothesis null denominates as:

H0 - reduces stock of housing available for long term housing

Are considered answers contributing to H0:

- Individuals who replied local accomodation units were in the tradicional/residencial lease before: **18**
- Individuals who replied local accommodation units were obtained through leasing, and before the property was habitable: **4**
- Individuals who replied local accomodation units were bought, and before the property was habitable: **4**
- Individuals who replied local accomodation units were get through heritage and before the property was habitable: **3**
- Individuals who replied local acoomodation units used to be main residence and now is just tourist purpose: **15**

The units who used to be habitable by other people, even if not in the tradicional leasing, meaning they could be the owner and decided to sell or lease for LA, and so on, in this context, where the scope of the study is to understand if LA causes the expulsion of the residents, we consider that are reducing the stock of housing available for the tradiditonal leasing. The same for the units who used to be “main residence” and now are just for tourist purpose, because the family or individuals who used to live there, now (by their decision) had to move to other place, causing the desertification of that area.

So we can affirm through the indivuals answers, **44** units that are now on the local accomodation activity, are reducing stock of housing available for long term housing

H1 – the opposite

30,34% corresponds to H_0 . Since we are dealing with a sample (a fraction of the population), this estimate is subject to error, meaning the population may be higher or lower. To conclude with “statistical certainty” we can do the following:

p –Local accommodation units’ rate that could be available for Traditional Lease but by decision of the owners are in Local accommodation

$H_0: p=0$ versus $H_1: p>=0$

Basically, we are testing that proportion: is it zero, or is it greater than zero?

Statistic Test

$\hat{p}/\sqrt{\hat{p}(1-\hat{p})/(n-1)}$, where \hat{p} is the estimated proportion based on the sample (the 0.3034).

If we conduct the test at 5% significance, we reject H_0 if the test statistic is greater than 1.645.

Now the value of the test statistic **7,92** is much higher than 1.645, so we reject H_0 in favor of H_1 , meaning the rate of ULA could be available for TL, but by decision of the owners are in LA is higher than 0.

We can conclude LA is reducing the stock and consequently the depopulation in the Lisbon area.

5.2. IS THE LOCAL ACCOMMODATION IN LISBON ASSOCIATED WITH A NEW TOURIST PRODUCT OR NEW FORM OF TOURISM BASED ON SHARING?

As we saw on the results chapter 4, 93,8% of the units in the local accommodation are full apartments, and most of the people never considered the traditional leasing.

In a context where LA is associated to face the tourist demand, is important to bring the difference between people who has the LA only for profitability and is the only source of income, meaning is a new tourist product, or there is other reasons and is one of the sources of income.

6. CONCLUSIONS

There are several areas with excessive pressure in LA, especially in the historic tourism center, which presents the risk of losing permanent accommodation, but also the loss of authenticity and compromising the sustainability of tourism.

Benefits are associated to answers for tourist demand, requalification of various areas of the city, more jobs, and so on.

Municipal legislation has been created to better control the expansion of these units as a way of protecting the "traditional" real estate market. Due to the laws created, new registrations of local accommodation reached, in October, a minimum of almost three years but fewer houses entering the tourist rental market is not synonymous with more offers for those looking for a rental for life.

As the questionnaire reveal, individuals don't put the unit in the local accommodation traditional lease mainly because the high profitability in Local Accommodation.

30,3% units of LA used to be vacant, showing the big problem we live the central Lisbon areas, where there is a lot of buildings without people. We have people without houses and houses without people.

In 2019, the government tried to remediate this problem by demanding legislative authorization to extend the concept of "vacant" and force the traditional leasing.

To rehabilitated and with the purpose to create residences in Lisbon, property owners of vacant lodgings located in a containment area would be punished with an elected tax burden.

Anyway, is important to see the both sides of the "coin". There is a big problem in the house supply, raising taxes, delaying rehabilitation and consequently the development and expansion of the city.

But we still need to be careful when LA starts to grow without control in certain areas. It is evident that there is this advantage of not concentration. I think that the main cities will certainly follow that same path of not allowing too much concentration in the city centers.

7. BIBLIOGRAPHY

- Belk, R. (2014). You are what you can access : Sharing and collaborative consumption online. *Journal of Business Research*, 67(8), 1595–1600.
<https://doi.org/10.1016/j.jbusres.2013.10.001>
- Böcker, L., & Meelen, T. (2017). Sharing for people, planet or profit? Analysing motivations for intended sharing economy participation. *Environmental Innovation and Societal Transitions*, 23, 28–39. <https://doi.org/10.1016/j.eist.2016.09.004>
- Cockayne, D. G. (2016). Sharing and neoliberal discourse: The economic function of sharing in the digital on-demand economy. *Geoforum*, 77, 73–82.
<https://doi.org/10.1016/j.geoforum.2016.10.005>
- Dg-flup, S. M., & Resumo, C. (2008). O " alojamento local " – entre o impulso da novidade e a, 1–24.
- Dinheiro Vivo. (2019,December)..Não há novas casas a entrar no arrendamento tradicional.
<https://www.dinheirovivo.pt/economia/nao-ha-novas-casas-a-entrar-no-arrendamento-tradicional/>
- Eduardo, D., Dias, M., Henriques, B., Doutora, P., Frederica, T., & Valsassina, T. (2016). O impacto do alojamento local na reabilitação urbana em Lisboa Arquitetura Júri.
- Expresso Journal. (2019,November). Airbnb é economia de partilha, não hotelaria. Augusto Mateus propõe limites ao alojamento local semelhantes aos de Amesterdão.
<https://expresso.pt/economia/2019-11-15-Airbnb-e-economia-de-partilha-nao-hotelaria.-Augusto-Mateus-propoe-limites-ao-alojamento-local-semelhantes-aos-de-Amesterdao?fbclid=IwAR2kPO2ixynhVI7BvcPuWuNeNhtRCk8iD3juVytVkXXybwPB-unkKGPapAQ>
- Fazenda, Nuno | Gouveia, Ana | Prado, A. |, & Gaspar, Fernando| Costa, Inês Elias | Ferreira, Isabel Feijão | Lourenço, Joana | Parreira, José | Gomes, Paula | Duarte, Teresinha | Gonçalves, T. C. (2017). Estratégia 2027. *Estratégia 2027*, 66. Retrieved from http://estrategia.turismodeportugal.pt/sites/default/files/Estrategia_Turismo_Portugal_ET2027.pdf
- Ferreira, M. J., & Campos, P. (2011). Dossiês Didáticos - XI - O Inquérito Estatístico: uma

introdução à elaboração de questionários, amostragem, organização e apresentação dos resultados.

Frenken, K., & Schor, J. (2017). Putting the sharing economy into perspective. *Environmental Innovation and Societal Transitions*, 23, 3–10. <https://doi.org/10.1016/j.eist.2017.01.003>

Guerra, I. (2012). CIDADES , Comunidades e Territórios, 22(2011), 41–68.

Guyader, H., & Piscicelli, L. (2019). Business model diversification in the sharing economy: The case of GoMore. *Journal of Cleaner Production*, 215(March), 1059–1069. <https://doi.org/10.1016/j.jclepro.2019.01.114>

Hawlitsek, F., Teubner, T., & Gimpel, H. (2016). Understanding the sharing economy - Drivers and impediments for participation in peer-to-peer rental. *Proceedings of the Annual Hawaii International Conference on System Sciences*, 2016–March, 4782–4791. <https://doi.org/10.1109/HICSS.2016.593>

Hoepfl, M. C. (1997). HOEPFL_Choosing_qualitative_research_.1997_[1].pdf, 9(1), 47–63. <https://doi.org/10.21061/jte.v9i1.a.4>

Hong, T. P., Lin, W. T., Chen, C. H., & Ouyang, C. Sen. (2009). Learning membership functions in takagi-sugeno fuzzy systems by genetic algorithms. *Proceedings - 2009 1st Asian Conference on Intelligent Information and Database Systems, ACIIDS 2009*, 10, 301–306. <https://doi.org/10.1109/ACIIDS.2009.18>

Horn, K., & Merante, M. (2017). Is home sharing driving up rents ? Evidence from Airbnb in Boston. *Journal of Housing Economics*, 38, 14–24. <https://doi.org/10.1016/j.jhe.2017.08.002>

Leismann, K., Schmitt, M., Rohn, H., Baedeker, C., Belk, R., Law, Y., ... Byers, J. W. (2015). 1#_What ' S Mine Is Yours. *Procedia Computer Science*, 58(1), 273–358. <https://doi.org/10.2139/ssrn.2549919>

Local, A., & Debate, U. (2018). José Caetano Clemente A problemática Fiscal do.

Moura, D. (2001). As Políticas de Habitação na Europa, 53–69.

Quattrone, G., Proserpio, D., Quercia, D., Capra, L., & Musolesi, M. (2016). Who benefits from the “sharing” economy of airbnb? *25th International World Wide Web Conference*,

- WWW 2016, (February 2016), 1385–1393. <https://doi.org/10.1145/2872427.2874815>
- Ribeiro, M. B. (2017). O Impacto do Turismo no Centro Histórico de Lisboa, 82.
- Sarrión-Gavilán, M. D., Benítez-Márquez, M. D., & Mora-Rangel, E. O. (2015). Spatial distribution of tourism supply in Andalusia. *Tourism Management Perspectives*, 15, 29–45. <https://doi.org/10.1016/j.tmp.2015.03.008>
- Schor, J. (2016). Debatiendo la economía del intercambio. *Diario de Autogobierno y de La Economía Ceeol.Com*, (October), 14. Retrieved from https://www.greattransition.org/images/GTI_publications/Schor_Debating_the_Sharing_Economy.pdf%0Ahttps://www.ceeol.com/content-files/document-431329.pdf
- Smith, D. N. (2014). Gentrificação e políticas de reabilitação urbana em Portugal : uma análise crítica à luz da tese rent gap de Neil Smith Introdução.
- Smith, N., & Smith, N. (2007). Toward a Theory of Gentrification A Back to the City Movement by Capital , not People Toward a Theory of Gentrification, 4363. <https://doi.org/10.1080/01944367908977002>
- Tel, I. (n.d.). &evbsep #sjup)fosjrvft, 8.
- Wachsmuth, D., & Weisler, A. (2018). Airbnb and the rent gap: Gentrification through the sharing economy. *Environment and Planning A*, 50(6), 1147–1170. <https://doi.org/10.1177/0308518X18778038>
- Wittel, A., & A., W. (2011). Qualities of sharing and their transformation in the digital age. *International Review of Information Ethics*, 15, 4. <https://doi.org/10.1101/gr.361602>
- Zervas, G., Proserpio, D., & Byers, J. (2013). The Rise of the Sharing Economy: Estimating the Impact of Airbnb on the Hotel Industry. *Ssrn*, LIV(October), 687–705. <https://doi.org/10.2139/ssrn.2366898>

8. ANNEXES

ANNEX A

	SAS				STP2e	STP21e														
	Ni	ni	Precisão (d)																p	0.173913
E1	4658	211		0.05	155	213	256													
E2	1789	197		0.05	59	82	98													
E1+E2	6447	408		0.05	214															
E3	330	133		0.05	74	15	30													
E4	295	127		0.05	66	14	30													
E5	139	86		0.05	32	6	30													
E1+E2+E3	764	346		0.05	172															
	7211			0.04		330	444													

ANNEX B - Flowchart

